Correspondence

TO THE EDITOR, *British Journal of Venereal Diseases*

Insufficient evaluation of acrosoxacin in treating gonorrhoea

Sir,

I recently conducted a single blind study comparing the efficacy of 300 mg acrosoxacin with 3·5 g ampicillin plus 1 g probenecid in uncomplicated gonorrhoea in men. Tables I and II show that the results were unremarkable, but the accompanying review of the literature (Table III)[1-9] raised some important questions, albeit not for the first time.[10]

Acrosoxacin is only intended for use in gonorrhoea, and its particular interest is its resistance to β-lactamase. It was therefore disappointing to find that the numbers of oropharyngeal infections (in both sexes) and rectal infections (in men) assessed were too small for useful comment and that only 69 cases of infection with β-lactamase producing strains had been studied.

Trials of new drugs should be large enough to encompass these problems; after all gonorrhoea is not a rare disease. It is understandable that a cephalosporin, for example, which has many other uses, may be marketed without full evaluation of its efficacy in all forms of gonorrhoea, but drugs such as acrosoxacin, which are promoted exclusively for the treatment of

TABLE I *Treatment of gonorrhoea with acrosoxacin compared with ampicillin and probenecid*

Treatment	First visit		Second visit		Cumulative cure rate (%) at 2nd visit
	No evaluated	*Failures and reinfections*	*No evaluated*	*Failures and reinfections*	
Acrosoxacin 300 mg (n = 130)	120	9 + 2	97	0 + 2	88
Ampicillin 3·5 g + probenecid 1 g (n = 158)	147	3* + 0	118	4 + 1	93·4
Significance	χ^2 = 3·4 (not quite significant at 5% level)		χ^2 = 1·75 (not signficant at 5% level)		

*Included one PPNG strain.

TABLE II *Minimum inhibitory concentrations of penicillin and acrosoxacin for 427 isolates of Neisseria gonorrhoeae*

	No of isolates inhibited by concentrations (mg/l) of:									
	0·007	*0·007*	*0·015*	*0·03*	*0·06*	*0·12*	*0·25*	*0·5*	*1·0*	*>1·0*
Penicillin*	31	70	71	48	102	53	18	14	7	13
Acrosoxacin†			61	235	88	30	10	3		

*MIC OF ⩽0·03 mg/l for 50% of the isolates.
†MIC of ⩽0·06 mg/l for 90% of the isolates.

TABLE III *Comparison of selected published data* showing treatment of uncomplicated gonorrhoea with acrosoxacin*

	No of treatment failures/No treated:							
	Men			*Women*			*Strains isolated*	
	Urethra	*Pharynx*	*Rectum*	*Urethra/Cervix*	*Pharynx*	*Rectum*	*PPNG*	*Non-PPNG*
Klehr and Klehr[1]	0/4			12/108			0/2	12/108
Handfield *et al*[2]	1/15		0/2	2/16	1/4	0/8		4/31
Bataillard[3]				2/78		2/27		2/78
Dolivo[4]	3/30						0/2	3/28
Soendjojo *et al*[5]	3/58						0/3	3/55
Calubiran *et al*[6]				0/81	0/2	0/34	0/35	0/47
Harrison *et al*[7]	0/47						3/24	5/23
Walsh *et al*[8]	7/76			0/24			1/2	7/98
Romanowski *et al*[9]	6/62	1/2		3/51	1/5	0/16	0/1	9/112
Total	20/292	1/2	0/2	19/358	2/11	2/85	4/69	45/580
Success rate (%)	93·1	50	100	94·7	81·8	97·6	94·2	92·2

*Included in the above are all published reports of PPNG strains and oral and rectal infections in both sexes.

gonorrhoea, surely deserve more thorough assessment.

Yours faithfully,

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TO THE EDITOR, *British Journal of Venereal Diseases*

Activity of the newer quinolones against *Chlamydia trachomatis*

Sir,

The activity of ciprofloxacin and norfloxacin against *Chlamydia trachomatis* have been described.[1 2] We wish to report the activity of a particular family of newer quinolones, the fluorated piperazinyl substituted derivatives (ciprofloxacin, norfloxacin, ofloxacin, and pefloxacin) against *Chlamydia trachomatis.*

The antibiotics mentioned as well as two earlier analogues, nalidixic acid and oxolinic acid, and two drugs established in the management of chlamydial infections (erythromycin and tetracycline) were tested in vitro on a *Chlamydia trachomatis* serotype L_2 strain. One day old monolayers on glass cover slips of McCoy cells treated with cycloheximide were inoculated with 10^3, 10^4, or 10^5 chlamydia inclusion forming units. Inoculation and incubation were standard. After 48 hours the cover slips were stained with iodine and examined for inclusions. In a second experiment, minimum bactericidal concentrations (MBCs) were measured after four passages.

TABLE *MICs and MBCs of eight drugs for Chlamydia trachomatis*

Drugs	*MIC (mg/l)*	*MBC (mg/l)*
Ciprofloxacin	1	2
Norfloxacin	8	8
Ofloxacin	0·5	0·5
Pefloxacin	2	2
Nalidixic acid	>128	
Oxolonic acid	32	
Erythromycin	0·125	0·250
Tetracycline	0·032	0·064

Our results for ciprofloxacin and norfloxacin confirm those of other workers.[1 2] In the group of new quinolones tested, ofloxacin showed the highest activity. MBCs were found to be very close to the MICs, which should prove to be clinically relevant. No inoculum effect was seen.

Data from this and other studies suggest that the fluorated piperazinyl substituted quinoline derivatives are the only quinolines to display antichlamydial activity. Nalidixic acid and oxolinic acid were found to be inactive in this study; and cinoxacin and pipemidic acid were found to be inactive by Heessen and Muytjens.[1]

The clinical relevance of this activity remains speculative.

Yours faithfully,

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TO THE EDITOR, *British Journal of Venereal Diseases*

Use of air dried vaginal specimens in the diagnosis of candidiasis and anaerobic vaginosis (non-specific vaginitis): effects of storage at room temperature

Sir,

Vaginal discharge constitutes one of the most common reasons for attendance at departments of genitourinary medicine and is a frequent presentation in general practice. Microscopical examination of stained vaginal secretions has been shown to be an extremely sensitive method of diagnosis in anaerobic vaginosis, which in our experience is a more common infection than candidiasis or trichomoniasis.[1-4] However, facilities and expertise are not generally available outside specialist clinics and laboratories for such examination.

To assess the viability of unfixed, unstained slides (such as might be taken in general practice and forwarded to a laboratory or clinic), we have looked at 100 vaginal preparations taken from 25 new patients attending a department of genitourinary medicine at this hospital. Four vaginal specimens taken from each of the 25 women were air dried at room temperature. One of the specimens was immediately Gram stained and examined microscopically (× 100 oil immersion objective) while the remaining three preparations were stored, then Gram stained and read at 24 hour intervals. The microscopist was in all cases unaware of any previous microscopical findings. The table shows that there was no loss of diagnostic sensitivity for either anaerobic vaginosis or candidiasis.

TABLE *Slide diagnoses in 25 patients*

	Slides Gram stained and read at:			
	0 hours	*24 hours*	*48 hours*	*72 hours*
Anaerobic vaginosis*	11	11	11	11
Candidiasis*	5	6	6	6
Normal flora only	6	5	5	5
Other (postcoital or menstrual smear)**	4	4	4	4

*One patient had candidiasis and anaerobic vaginosis.
**Three of these patients had *Candida albicans* on culture only.